

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,860	08/01/2003	Shinji Ichikawa	240337US-2 DIV	9154
22850	7590 08/25/2005		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			MILLER, BRIAN E	
ALEXANDRIA, VA 22314		ART UNIT	PAPER NUMBER	
	,		2652	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Comments	10/631,860	ICHIKAWA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Brian E. Miller	2652				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of the	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 5/23/	<u>′05</u> .					
2a)⊠ This action is FINAL . 2b)☐ This	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-3,6-8 and 10-12</u> is/are pending in the application.						
4a) Of the above claim(s) 1-3,7,8,10 and 12 is/	4a) Of the above claim(s) <u>1-3,7,8,10 and 12</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>6 and 11</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8)⊠ Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 		-(d) or (f).				
2. Certified copies of the priority document		on No.				
3. Copies of the certified copies of the prior	rity documents have been receive					
application from the International Bureau * See the attached detailed Office action for a list	· ·	d				
occ the attached detailed office action for a list	or the defined doples not receive	u.				
AMk/->						
Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413)						
2) Notice of Praftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:	atent Application (PTO-152)				

Application/Control Number: 10/631,860 Page 2

Art Unit: 2652

This application is a DIV of 09/615,776 and claims 1-3, 6-8, 10-12 are now pending.

Election/Restrictions

1. Applicant's election with traverse of species (3), i.e., claims 6 & 11 in the reply filed on 5/23/05 is acknowledged. The traversal is on the ground(s) that the examination of species I, II and III would not be a serious burden on the Examiner. This is not found persuasive because each of the various disclosed species define mutually exclusive characteristic of a read/write head supporting mechanism with an interconnecting wiring pattern as evidenced by the representation of each species with a different set of figures. A search for one of these mutually exclusive characteristics is not coextensive with a search for other mutually exclusive characteristics and therefore searching for all mutually exclusive characteristics could not be done without serious burden to the Examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-3, 7-8, 10, 12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5/23/05.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2652

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- Claims 6 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over LEE et al (US PGPUB 2001/0001587) in view of Hatagami et al (US 6,163,443). (As per claims 6 & 11) LEE et al discloses a read/write system and head supporting mechanism 500, as shown generally in FIGs. 1, 5 & 9, including a slider 910 provided with an electromagnetic transducer element 330 and a suspension 940 wherein the slider 910 is supported on the suspension 940 by a microactuator 920 configured to displace the slider (see paragraph [0065]); an interconnecting pattern 941 (see FIG. 9) connected to the slider via 911 including a wire 941 for electrical connection to the electromagnetic transducer element; the wire interconnecting pattern including a close-contact wire in close contact with the suspension 940, i.e., the horizontal component thereof as shown in the figure, a floating wire, i.e., the vertical extension at the tip of the suspension that extends up to terminals 911, that extends away from the suspension to the slider and is movable and/or deformable in a displacement direction of the slider by the microactuator 920.

LEE et al is silent, however, to an additional grounding wire within the interconnecting pattern. Hatagami et al discloses a suspension assembly 35 and as shown in FIG. 9 the suspension includes a wiring interconnecting pattern 50, i.e., FPC, to the slider/head assembly 32 including a grounding wire 61 and lead lines 58, 60, 64 & 66 to the head assembly (see col. 7, lines 35-44).

Application/Control Number: 10/631,860

Art Unit: 2652

From this teaching, it would have been obvious to one having ordinary skill in the art to have modified the interconnecting pattern of LEE with the interconnecting pattern of Hatagami et al having a grounding wire. The motivation would have been: including a grounding wire would have protected an MR or other read element by reducing static electricity from flowing into it (see col. 7, lines 45-55) to thereby extending the longevity of the head assembly, as would have been realized by a skilled artisan having the teachings of Hatagami et al.

Response to Amendment

- 6. Applicant's arguments with respect to claims 6 & 11 have been considered but are moot in view of the new ground(s) of rejection.
- A...In view of the amendments to the claim(s), the newly cited references are deemed to be appropriate.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Application/Control Number: 10/631,860 Page 5

Art Unit: 2652

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

8. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brian E. Miller whose telephone number is (571) 272-7578. The

examiner can normally be reached on M-TH 7:15am-4:45pm (and every other friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian E. Miller

Primary Examiner

Art Unit 2652

BEM

August 22, 2005